



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,238	02/09/2004	Masaji Noguchi	19546.0048	6900
7590 Swidler Berlin Shereff Friedman, LLP Suite 300 3000 K Street, NW Washington, DC 20007-5116			EXAMINER SINGH, DALZID E	
			ART UNIT 2613	PAPER NUMBER
			MAIL DATE 11/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/773,238	NOGUCHI ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Dalzid Singh	2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 22 August 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6, 8, 12-14 and 16-20 is/are rejected.
- 7) Claim(s) 7, 9-11 and 15 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 16-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 recites "branching means for branching output of said wavelength selecting means to the first to third lights; first filter means for inputting said second light and selectively transmitting light of the output light wavelength of said first reference light source;"

It is unclear what does the claim refers to as branching output of said wavelength selecting means to the first to third lights. Furthermore, it is unclear how the first filter means which receives a second light is outputting first reference light source. Does the filter also receive the first reference light?

Claim 5 recites the limitation "input light". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kai et al (JP 2000-241782).

Regarding claims 1 and 20, Kai et al disclose a wavelength selection module, as shown in Fig. 12, comprising:

wavelength selecting means (90) for inputting a light, multiplexing lights of a plurality of different wavelengths (multiplexer (89) provide multiple signals which comprise of light from element (82) and multiplexed light from element (81)), and selecting and outputting lights of the plurality of wavelengths other than a reference light in accordance with a control signal applied from an external circuit (the reference light from element (82) is used for monitoring purpose therefore it is not being output to coupler (91) for the transmission line); and

demultiplexing means (91) for demultiplexing and outputting each wavelength of the output lights of said wavelength selecting means.

Regarding claim 2, further comprising means for inputting output lights of said demultiplexing means and outputting lights of unwanted wavelengths through an

attenuation process (as shown in Fig. 12, light from demux (91) is inputted to mux (92) and the unwanted wavelength is provided to elements 97, 99 and 100).

Regarding claim 3, wherein the wavelength selection means is an acousto-optical tunable filter (AOTF) (see Fig. 12).

Regarding claim 4, wherein the AOTF (90) includes means for selecting a light of the wavelength corresponding to the frequency of an RF signal (98) applied to an inter digit transducer through an RF signal input port (see Fig. 12).

Regarding claim 5, Kai et al disclose wavelength selection module comprising: wavelength selecting means (90) for selecting and outputting a plurality of wavelengths other than a reference light (the reference light from element (82) is used for monitoring purpose therefore it is not being output to coupler (91) for the transmission line) from an input light in accordance with an external control signal (control signal is provided from (98));

an optical filter including demultiplexing means (91) for demultiplexing output light of said wavelength selecting means into lights of a plurality of wavelengths; reference light source means (82) for generating a reference light for said filter; and

multiplexing means (83) for multiplexing input light and said reference light and inputting the multiplexed light to said wavelength selecting means.

Regarding claim 6, wherein said demultiplexing means includes monitor output (provided to elements 97, 99 and 100) and control signal for controlling said

wavelength selecting section when the light of the wavelength of said reference light source is outputted to said monitor output and a control signal for controlling said wavelength selecting section based on the wavelength of said reference light source are controlled (the output from elements 97, 99 and 10 is provided to control AOTF (87)).

Regarding claim 8, Kai et al disclose wavelength selection module, as shown in Fig. 12, comprising:

wavelength selecting means (90) for selecting and inputting lights of a plurality of different wavelengths other than a reference light (the reference light from element (82) is used for monitoring purpose therefore it is not being output to coupler (91) for the transmission line);

branching means (91) for branching output of said wavelength selecting section to a first light and a second light;

first filter means (87) for inputting said second light and selectively transmitting light of the particular wavelength; and

control means (100) for adjusting a relationship between a control signal applied to said wavelength selecting means and the selected wavelength on the basis of said control signal, output of said first filter and transmitting wavelength of said filter.

Regarding claim 12, Kai et al disclose a wavelength selection module, as shown in Fig. 12, comprising:

reference light source (82) means for providing a constant output wavelength;

multiplexing means (89) for multiplexing input light including lights of a plurality of different wavelengths and output light of said reference light source;

wavelength selecting means (90) for inputting output light of said multiplexing means and selecting and outputting lights of a plurality of wavelengths other than the reference light in accordance with an external control signal (98);

branching means (91) for branching output of said wavelength selecting means into a first light and a second light;

a first filter (87) for inputting said second light and selectively transmitting light of the wavelength of output light from said reference light source; and

control means (100) for adjusting a relationship between the control signal applied to said wavelength selecting means and the selected wavelength in accordance with said control signal, output of said first filter and wavelength of said reference light source.

Regarding claim 13, wherein said control means includes means for controlling said control signal (from 98) to continuously select the light selectively transmitted through one of said first (87) and second filter with said wavelength selecting means.

Regarding claim 14, wherein said control means (100) includes means for controlling an output of the light transmitted selectively with one of said first and second filters to said first light by controlling output of said control signal corresponding

to the light selectively transmitted by said first or second filter (the control signal from control means (100) is transmitted thru controlling CPU inside (87) to control the control signal).

***Allowable Subject Matter***

4. Claim 16 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claims 7, 9-11 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalzid Singh whose telephone number is (571) 272-3029. The examiner can normally be reached on Mon-Fri 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

November 20, 2007

DALZID SINGH  
PRIMARY EXAMINER  
*Dalzid Singh*